

Prof. Charanjit Singh Shah

REDEFINING INDIAN SMART & SUSTAINABLE CITIES

Forewords by

William Hooper A.K. Jain Tracey Hummer S.M. Akhtar Pradeep Patel

Preamble by

Dr S.S. Bhetti

"Cities are the manifestations of human settlement"

A simple statement, yet it forms the core of this attempt towards writing a book essentially based on diverse growth of cities all over the world. If we rewind back to the times when the human race was evolving continuously with knowledge and understanding of functionality, innovations and growth, it can be observed that the curious minds started developing settlements at certain places. The basis of these settlements was planning human spaces, keeping in mind, the different uses, livable needs, safety and security, fear from flooding and wild animals, shelter from sun and rain and diversification of climate. Thus, the book captures the history of settlements, providing an overview of various ages of civilizations which eventually developed into today's smart cities. While the author has analyzed and studied the various civilizations, it is brought to the readers' attention that many innovations and technologies provided livable spaces, business opportunities like agriculture and various other trades which made the human living space prospering into small neighborhoods to communities to be eventually developed into large cities and collectively be labeled as a country.



Prof. Charanjit S. Shah Author, Redefining Indian Smart & Sustainable Cities Founding Principal, Creative Group



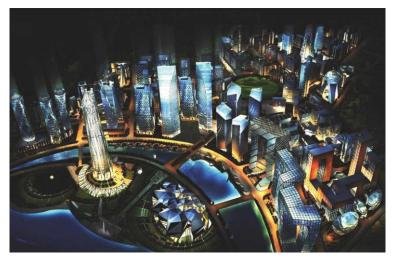
Grid Street Planning as evident in the Indus

The fast paced growth of the Indian economy, particularly its cities has produced urban crises, one that is marked by the lack of adequate infrastructure and growth management as well as by sharp social divisions that are bluntly stamped in a landscape of materialistic enclaves. Taking examples from our own past and how Indian cities have developed over the years, our modern settlements owe a great deal to the ancient civilizations like Indus Valley or Mesopotamia. A well planned street grid at the time when there were no vehicles and an elaborate drainage system hint that the occupants of the ancient civilizations were skilled urban planners with adequate knowledge of city services, drainage etc.

India has a very strong heritage which cannot be ignored. Attributing simple yet the most effective ways of urban and rural planning, we need to focus on strategies like neighborhood planning, inter phase between accessibility, efficiency and people's movement. But, is the architecture network around us capable enough to withstand the functioning of such technology? Are we just adding layers and layers of new innovations rather than upgrading the existing infrastructure? These questions raise an alarming situation. Therefore, the cynosure should be on building cities that enhance its residents' lives by utilizing the passive strategies of sustainable architecture and not just relying on technology to solve all our problems. Some Indian states are already experimenting with creating new cities with "smart" elements. Only one thing needs to be made sure of: Motivating Tradition through Modernity.

What is a smart city? Why do we need a smart city?

"It is a city which uses technology to run itself and manage resources efficiently. Everything from a smart city's governance to its public transport network, water distribution and waste disposal systems would use technology to provide better services to residents and make efficient use of resources. Due to the unplanned mushroom growth in Indian cities post independence, our cities are choking. These issues need to be addressed particularly in a wholesome manner presenting a pragmatic solution rather than taking a piecemeal approach which eventually eliminates into shifting stands



Proposed GIFT City in Gujarat: Skyscrapers coincidenting with Technology

without offering a perceptual resolution. Therefore, imitating the West in terms of gathering a 'smart city approach' would only leave us with limited advantages and many more problems. Moving away from the typical cogitation that use of technology is enough to build a smart city, we should consider a simple historical fact. Understanding cities is vital to understanding our civilization. Therefore, redefining a smart city, I think that a city should be embedded with nature and enrolls the passive strategies of sustainability while gaining from the historically successful planning approach", says Prof. Charanjit S Shah.

The previously built Indian cities were simple yet intelligent without an abstract use of technology. Therefore, redefining a smart city, the author proposes various interventions for our existing smart city model, a new outlook which is embedded with nature and enrolls the passive strategies of sustainability while gaining from the historically successful planning approach. This book defines the dedication of Prof. Charanjit Shah to the very noble profession of Architecture and sensitivity to planning, respect for Indian culture, infrastructure, connectivity, keeping in pace with modern technology and intelligent use of natural resources for futurist sustainable smart cities. Professor Shah is a unique example of what the leadership in the Architecture profession means. The depth of research in the history of development of cities in our world, and writing the fundamentals to think about future sustainable cities consistent with culture, is commendable.

"Therefore, a planning and architectural intervention is very important to be realized and merge the strong Indian Ethnic Architecture and the modern trends of planning and with advanced use of technology in terms of services, infrastructure and city development, thus creating sustainable and futuristic Indian Smart Cities, "Envisions Prof. Charanjit Shah is his quest to see and be able to help in the development of the New Age yet Traditional "Smart India." This is a most timely publication for readers in India and abroad for architects and engineers. It should inspire them to plan, design and implement Architecture to maintain its economics and technological edge in the 21st century.

"Park within Town, Town within City"



Vision 2057- Jamshedpur City

A vision provided by the author and his team at Creative Group and other associates in creating vision 2057 for Jamshedpur, an Industrial town of 64 sq. km. into a green walkable and cyclable city. In the words of Prof. Charanjit Singh Shah, any built mass as human settlement should not be taken as a mass of concrete and brick but as a living organism which breathes and is embodied with nature creating sustainable, green as well as smart development. A deep smart study of modern smart city Gift city in Gujrat, Mazdhar in Abu Dhabi which have diversified feature of sustainability as well as smart towns made for a purpose are highlighted in this book. Keeping in view all background of city manifestation of human settlement and penetrating through the various innovation, aspirations of the people the cities which are facing the alarming situation in today's scenario, there we will find air, water, noise pollution rising to a level beyond controllable and becoming centers of undesirable diseases but in the shelter of making them smart with modern

systems of transportation and automation is heading to very chaotic and inhuman and non-livable spaces.



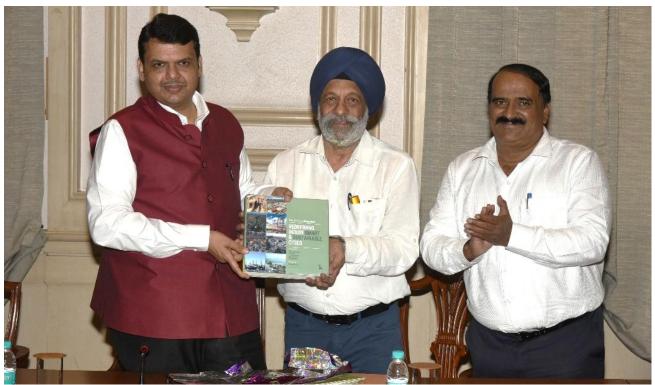
City within Town, Town within city of Jamshedpur

Redefining Indian Smart & Sustainable Cities

The book was formally released at a conference held at Hotel Eros, Nehru Place, New Delhi on 12th July, 2017 by Sh. Nayak, President of Council of architecture, Sh. Balbir Verma, Ex-president of Indian Institute of Architects; Sh V. P Agrawal, Ex-Chairman of Airport Authority Of India, Ar. A. K Jain, Commissioner DDA and Dr. S.M. Akhtar, Dean Prof of Jamia Milia Islamia.



Along with the elite gathering of professionals, Ar. Sammit Manchanda, Chairman of Indian Institute of Architects Northern Chapter; Prof. Neeraja Lugani, Dean I.P university school of Architecture; Prof. Vivek Sabherwal, Director APJ school of Architecture, Ar. Vijay Garg Vice President Council of Architecture, Ar. Gaurav Wahi SR Vice President JLL, Sh. Vinod Jain President, INMACS Management Services Ltd., Ar. Debayan V. President Lander & Brown, USA, and other great eminent personalities. The release ceremony was concluded with a brain storming session with various track holders to find way for proper program in designing and execution in creating smart sustainable cities of tomorrow, the dream come true of the great visionary personality respected Prime Minister of India Shr. Narendra Modi.



Prof. Charanjit S Shah while presenting the book to honorable Chief Minister of Maharashtra, Sh. Davendra Fadnavis, and Managing Director of Maharashtra Airport Development Corporation, Sh. Viswash Patel (IAS), wherein the Chief Minister appreciated the effort of Prof. Shah and his concern about creating Indian Smart Citiesand need of all professionals, technocrats, bureaucrats to work as a team with integrated approach towards smart and sustainable developments

"Prof. Shah is a personification of often said but seldom preached, synergy of academics and practice, theory and practically, simple and complex problem sand solution, an architect lifelong thinker & performer translates his thoughts in Redefining Indian Smart & Sustainable cities - a coffee table book worth reading and grasping the practical aspects in shaping Indian cities of tomorrow, says in the foreword of the book.

-A.K. Jain Commissioner (Planning), DDA, Delhi



By learning from other cities as explained in this book among them London, Paris and Barcelona — past and present are carefully conveyed and illustrated, highlighting thewalk able, cyclable, breathable qualities and intermodal connectivity that make these places especially green and great. Prof. Shah is uniquely qualified to examine historic and present-day New Delhi, where helives andworks. Throughout this important book, Prof. Shah presents sustainable solutions with great clarity and optimism.

-Tracey Hummer Editor, Critic & Writer, Art and Architecture, New York (US)



"The ununcanny power of analytical discernment and synthetic comprehension has enabled Prof. Charanjit S Shah to explore the evolution of cities across the globe, wherein I am tempted to call Prof. Shah the Patrick Geddes of India. Prof. Shah is amang my life's most precious, discoveries and treasures by God's illimitable grace."

-Dr. (Ar.) S. S. Bhatti Chandigarh



This book is a confinable book with 400 colored pages is just to be an encyclopedia of thought and the Bible of knowledge in creating sustainable Smart Township looking upon

"Nature is life and life is within nature"

- Prof. Charanjit S. Shah.





We need to look beyond net zero so that the cities are self-sustainable in water, energy, and solid waste and not dependent on manmade materials and services to be imported from outside world. The smartness does not only lie in the automation and technology but needs to practice in Love of Nature and the natural resources creating natural healthy environment which are organic and not cosmetic.